

## The Factors Influence on Employee Performance of Small Companies in Shandong

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### ABSTRACT

- This study, based on a survey of 400 employees in small companies in Shandong, utilized a questionnaire as the primary data collection tool. The statistics used to analyze the data were descriptive statistics, including Frequency, Percentage, Mean, and Standard Deviation, and inferential statistics, including Independent Samples t-test, One-way ANOVA, LSD, and Multiple Linear Regression at a significance level of 0.05. The results found that most of the respondents were male, 25-34 years old, with an education level of bachelor, Full-time worker and monthly income of less than 5,000 CNY, work experience of less than 1 year, and Number of employees is 1-10 members. The first hypotheses were tested, and the results found that the differences in gender, age, education level, monthly income, work experience, and Number of employees significantly influenced employee performance. The results of the second hypothesis tested showed that adhocracy, market, clan, and hierarchy cultures significantly influenced employee performance.

**Keywords:** Green perceived value, social responsibility, consumer purchase intention, employ performance, small companies

## **INTRODUCTION**

As one of China's significant economic powerhouses, Shandong Province has long been a hub for small-scale enterprises. These small businesses play a crucial role in Shandong's economic development, generating substantial employment opportunities and driving local industries. Consequently, the issue of employee performance enhancement in Shandong Province has been a subject of considerable interest. Finding ways to improve employee performance is vital for promoting the development of these enterprises (Liu & Wu, 2022).

Small-scale enterprises face limited resources, intense competition, and management complexities. These challenges necessitate a heightened focus on employee performance, as improved performance is essential for a company's competitiveness and long-term success. However, compared to large corporations, small businesses often encounter unique issues and obstacles in employee performance management. Previous research has underscored the role of organizational culture in stimulating employee innovation and motivation (Liu & Wu, 2022).

Moreover, it has a positive impact on organizational culture and performance. However, there is a need to investigate how small-scale enterprises, which might have different organizational structures and cultural dynamics compared to large corporations, can develop and maintain a conducive culture that promotes performance. This research gap highlights the opportunity to explore the specific elements of organizational culture that are most effective in small business settings. Furthermore, while Aguinis (2019) highlights the importance of effective performance management, the nuances of implementing performance management systems in small enterprises remain underexplored. These systems may need to be adapted to the unique characteristics of small businesses, and a research gap exists in understanding the strategies and practices that are most effective in enhancing employee job performance within this context.

Finally, the impact of demographic factors on employee performance in small businesses is another research gap. Ng and Feldman (2012) suggest that characteristics like age, gender, and education level may affect performance differently. However, limited research examines explicitly how these demographic factors interact with the small business context to influence performance. Understanding these dynamics is crucial for tailoring human resource management practices within small enterprises.

This research explores the factors influencing employee performance in Shandong's small-scale enterprises, focusing on performance management, organizational culture, and demographic variables. In the context of this study, the term "small companies" pertains to enterprises operating within Shandong Province, China. The annual turnover is mostly below 20 million RMB, and the Number of employees in the company is less than 50. Addressing these research gaps will offer valuable insights to Shandong's small business owners and managers, helping them tailor performance management strategies and optimize employee performance in the face of their unique challenges while considering organizational culture and demographic factors, enabling them to optimize employee performance in this unique setting.

### **Research Hypotheses**

H1: Differences in demographic factors generate differences in employee performance of small companies in Shandong.

H2: Organizational culture influences employee performance of small companies in Shandong.

### **Research Objectives**

(1) To study the impact of demographic factors on employee performance of small companies in Shandong.

(2) To study the influence of organizational culture on employee performance of small companies in Shandong.

## **LITERATURE REVIEW**

### **Small Company in Shandong**

Small companies in Shandong Province play a crucial role in the local economic landscape. According to the research by Gong (2023), as of the end of June 2022, the number of small companies in Shandong Province reached 13.068 million, accounting for over 94% of the total market entities. This highlights the widespread presence of small companies in the Shandong economy, contributing to substantial employment opportunities and playing a vital role in driving economic growth.

As per Gong's (2023) study, Shandong ranked third in the national GDP in 2021, surpassing the national average growth rate. Small companies played a vital role in this achievement, providing crucial support for the sustained and healthy development of the Shandong economy. They contribute to over 60% of the GDP, solving 80% of employment issues, providing around 70% of patent rights, and contributing over 50% of tax revenue to society. These enterprises dominate not only in terms of quantity but also contribute significantly to innovation and market vitality. Small companies in Shandong Province possess immense potential and challenges within the local economy.

### **Demographic Factors**

Ng & Feldman (2012) state that demographic factors consist of age, gender, education level, income, full-time or part-time, year of work, and number of employees, which substantially influence employee performance. Hendrawijaya (2019) studied demographic factors and employee performance: The mediating effect of employee empowerment. The impact of age, gender, years of service, education, and the Number of dependents on one's family on employee empowerment is examined in this study, both directly and indirectly through employee performance. The sample comprised a random selection of ten respondents from each of the fourteen cigar companies in Jember Regency, East Java, Indonesia. There are 140 individuals in the samples. Path analysis is used in the study to ascertain the variables' direct and indirect impacts. The findings demonstrated that employee performance is significantly enhanced by demographic factors such as age, sex, education, years of service, and the Number of dependents on one's family.

Hendrawijaya (2019) studied demographic factors and employee performance: The mediating effect of employee empowerment. The findings demonstrated that employee performance is significantly enhanced by demographic factors such as age, sex, education, and years of service. Amegayibor (2021) studied the effect of demographic factors on employees' performance. The results indicate that demographic factors influence employees' performance.

### **Organizational Culture**

Organizational culture is a multifaceted and dynamic concept that significantly influences the behavior and performance of employees within an organization (Schein, 1992). Several foundational theories and frameworks have been developed to understand the complexities of organizational culture and its impact on various facets of business operations.

Mekka et al. (2020) studied the Influence of Organizational Culture on Employee Performance at Bappeda and Statistics of Bone Regency. A vibrant and enjoyable work culture fosters a positive employee mindset, motivating them to work with increased diligence and excellence. This study aimed to assess organizational culture's impact on organizational commitment within the context of Bappeda and Statistics of Bone. Employing an explanatory research design with a quantitative approach rooted in positivism, the study aimed to elucidate the causal relationships between variables influencing the proposed hypothesis. The findings underscore a noteworthy and positive correlation, indicating that organizational culture significantly influences employee performance.

Cameron and Quinn (2011). This model classifies organizational cultures into four types: Clan, Adhocracy, Market, and Hierarchy cultures. Distinct values and orientations characterize each type. Cameron and Quinn's framework provides a valuable lens through which to assess and compare the cultures of different organizations. Mekka et al. (2020) studied the Influence of Organizational Culture on Employee Performance at Bappeda and Statistics of Bone Regency. The findings underscore a noteworthy and positive correlation, indicating that organizational culture significantly influences employee performance. Wua et al. (2022) studied the influence of organizational culture on employee performance mediated by job satisfaction and organizational commitment. The findings demonstrate that organizational culture significantly and favorably impacts employee performance.

### **Employee Performance**

Employee performance refers to the capability, behavior, and outcomes employees demonstrate. It encompasses various aspects, including the extent to which employees fulfill their job duties, the quality of their work, innovation, work attitude, attendance, cooperation with colleagues, and contributions to organizational goals. According to Taylor & Pierce (1999), employee performance is "how employees meet or exceed expected standards in their job and interact and collaborate with colleagues in the work environment."

Employee performance is a critical factor that significantly influences an organization's overall development and success. The impact of employee performance on business outcomes is multifaceted, encompassing various dimensions that contribute to the achievement of organizational goals. First and foremost, employee performance is intricately linked to organizational productivity and efficiency. High-performing employees contribute to increased productivity, ensuring that tasks are completed effectively and goals are met promptly (Atkinson, 2006). This alignment between individual performance and organizational objectives is crucial for operational success. A study by Aguinis (2019) emphasizes that focusing on performance management leads to enhanced organizational performance, emphasizing the interconnectedness between individual contributions and collective success.

## **RESEARCH METHOD**

### **Research Instrument**

Due to the infinite population, the sampling method in this study is based on non-probability sampling, which is particularly convenient. This section comprises 7 closed-ended questions to gather essential demographic data from the participants. These questions are designed to acquire background information, offering valuable insights into the characteristics of the sample. The researcher used the Likert five-point scale, and participants were required to rate their degree of opinion on organizational culture. The researcher used the Likert five-point scale, and participants were required to rate their degree of opinion on employee performance.

### Reliability and Content Validity

The Item Objective Congruence Index (IOC) will be employed to evaluate content validity. Three experts with expertise in research tool development will independently evaluate the content and measurement of the questionnaire items to ensure that they effectively address the research objectives. The experts will rate each questionnaire item based on predefined criteria. The IOC index of the questions in the questionnaire is all above 0.67.

The results of the reliability of organizational culture, clan culture, adhocracy culture, market culture, and hierarchy culture are 0.865, 0.831, 0.890, and 0.847. All reliability is above 0.7. So, the questionnaire is suitable for collecting data in the future. The reliability of employee performance is 0.898. The reliability is above 0.7. So, the questionnaire is suitable for collecting data in the future.

### Data Collection and Analysis

In this research, data will be gathered through an online survey method. Online data collection is advantageous as it provides efficiency and convenience in reaching a broad spectrum of participants, facilitating a diverse and comprehensive sample representation. The online survey will use WeChat to collect data. **Descriptive Statistics:** Leveraging descriptive statistics, we will scrutinize respondent demographics, including gender, age, education level, occupation, monthly income, year of working, nature of employment, and number of employees, using frequency and percentage. The mean, standard deviation, and multiple regression are applied to the impact of clan culture, adhocracy culture, market culture, and hierarchy culture on employee performance.

**Inferential statistics** will be employed to test the hypotheses at a statistical significance level 0.05. The analysis will assess the influence between a dependent variable and independent variables based on the following hypotheses:

H1: To test whether demographic factors have a differential influence on employee performance, the researcher will analyze variance (ANOVA) and independent samples T-test. ANOVA and independent samples T-test will help determine if there are significant differences in employee performance among different demographic groups (Age groups, Gender, Education level, Income, Year of working, Nature of employment, and Number of employees). Independent Samples t-test (Gender, nature of employment) and the One-way ANOVA (Age groups, Education level, Income, Year of working, Number of employees.) are applied to test the hypothesis.

H2: To examine the influence of organizational culture on employee performance in small companies in Shandong, the researcher will utilize regression analysis. Multiple Linear Regression Analysis will allow us to delve deeper into the nature and magnitude of this influence, exploring how changes in organizational culture variables impact employee performance.

## RESULTS AND DISCUSSION

### Descriptive Analysis

Table 1. Frequency and Percentage of the Respondents

		Frequency	Percent
Gender	Male	201	50.25
	Female	199	49.75
Age	18-24 years old	55	13.75

	25-34 years old	178	44.50
	35-44 years old	135	33.75
	45-54 years old	18	4.50
	55 or old	14	3.50
<b>I</b> <b>Educational</b>	High School	179	44.75
	Bachelor's Degree	187	46.75
	Master's Degree	17	4.25
	Doctoral Degree	17	4.25
	Other	0	0
<b>Monthly Income (CNY)</b>	Below 5,000	229	57.25
	5,000-10,000	130	32.50
	10,001-20,000	15	3.75
	20,001-30,000	8	2.00
	Above 30,000	18	4.50
<b>Nature of Employment</b>	Full-time	396	99.00
	part-time	4	1.00
<b>Year of Working</b>	Less than 1 year	138	34.50
	1-2 years	96	24.00
	3-5 years	132	33.00
	6-10 years	13	3.25
	More than 10 years	21	5.25
<b>Number of Employees</b>	1-10	136	34.00
	11-20	125	31.25
	21-30	123	30.75
	More than 30 and lower than 50	16	4.00
<b>Total</b>		400	100

The descriptive analysis found that the majority are gender, with males constituting 50.25% of the population. The age distribution is primarily concentrated in the 25-34 age group (44.50%). The highest education level is predominantly the bachelor's degree (46.75%). Concerning the monthly income range, 57.25% of respondents have a monthly income of 5000 yuan or below. Full-time employment is prevalent, accounting for 99.00% of the respondents. Regarding work experience, most fall within the category of less than 1 year (34.50%). Employee numbers are mainly distributed in the ranges of 1-10 people (34.00%).

**Table 2.** The Descriptive Statistic of Organizational Culture

	Mean	SD	Meaning	Rank
Clan Culture	3.564	0.931	Agree	2
Adhocracy Culture	3.511	0.920	Agree	4
Market Culture	3.659	0.972	Agree	1
Hierarchy Culture	3.538	0.907	Agree	3
Organizational Culture	3.568	0.823	Agree	

From Table 2, the mean value of organizational culture dimensions is 3.568, with a standard deviation of 0.823. Among the dimensions, market culture reaches the highest level, with an average score of 3.659 and a standard deviation of 0.972. Following this is clan culture, with a mean value of 3.564 and a standard deviation of 0.931. Hierarchy culture has a mean value of 3.538 and a standard deviation of 0.907, and the lowest score is for adhocracy culture, with an average score of 3.511 and a standard deviation of 0.920. All the variables are at an agreed level.

**Table 3.** The Descriptive Statistic of Employee Performance

	Mean	SD	Meaning
<b>Employee Performance</b>	3.449	0.904	Agree

For Table 3, the mean value for the employee performance dimension is 3.449, with a standard deviation of 0.904, indicating the employee opinion level about employee performance is at an agreed level.

### Inferential Statistics

**Hypothesis 1:** Differences in demographic factors generate differences in Shandong employee performance in small companies. In this survey, gender and nature of employment are two-point discrete variables. Therefore, an independent sample t-test was used to analyze data for age, educational level, income, year of working, and Number of employees. Use one-way ANOVA to analyze data to test the difference of mean values among more than 2 data groups. All data analysis was tested at the statistically significant level of 0.05.

Table 4 shows the demographic data influencing employee performance at the statistically significant level of 0.05. The results indicate that the difference in gender, age, education level, income, year of working, and Number of employees generate differences in employee performance with significant values of .000, .000, .000, .000, .000, and .000 accordingly.

**Table 4.** Summary of Demographic Data Influence on Employee Performance

Demographic	Employee Performance	
Gender	t(398) = 5.664, P = 0.000	√
Age	F=27.326, P=0.000	√
Education	F=84.853, P=0.000	√
Monthly Income	F=80.312, P=0.000	√

Nature of Employment	of	t(398) = 0.825, P = 0.410	-
Years working	of	F=65.054, P=0.000	√
Number employees	of	F=22.587, P=0.000	√

The analysis of multiple comparisons of different age groups, education level, income, year of working, and Number of employees using LSD were analyzed. The results indicate that 1)The results indicate that the pair mean comparison of the age group influences overall employee performance in Shandong. The mean value of the age group 18-24 is lower than the age group 45-54 and the age group 55 or older, with a significant value of 0.000 and 0.000, respectively. The mean value of the age group 25-34 is lower than the age group 45-54 and the age group 55 or older, with a significant value of 0.000 and 0.000, respectively. The mean value of the age group 35-44 is lower than that of the age group 45-54 and the age group 55 or older, with a significant value of 0.000 and 0.000, respectively.

The results indicate that the pair mean comparison of the education levels that influence overall employee performance in Shandong. The mean value of the high school group is lower than that of the master's degree and doctoral degree groups, with a significant value of 0.00respectively. The mean value of the bachelor's degree group is lower than the master's degree group and doctoral degree group, with a significant value of 0.000 and 0.000, respectively.

The results indicate that the pair mean comparison of the monthly income influences overall employee performance in Shandong. The mean value of below 5,000 CNY group is lower than 10,001-20,000 CNY group, 20,001-30,000 CNY group, and Above 30,000 CNY group with a significant value of 0.000, 0.000, and 0.000. The mean value of the 5,000-10,000 CNY group is lower than the 10,001-20,000 CNY group, 20,001-30,000 CNY group, and Above 30,000 CNY group with a significant value of 0.000, 0.000, and 0.000 accordingly.

The results indicate that the pair mean comparison of the years of working that influence overall employee performance in Shandong. The mean value of the Less than 1 year group is lower than 3-5 years group, 6-10 years group, and more than 10 years group with a significant value of 0.000, 0.000, and 0.000 accordingly. The mean value of the 1-2 years group is lower than the 6-10 years group and more than 10 years group with a significant value of 0.000 and 0.000 accordingly. The mean value of the 3-5 years group is lower than the 6-10 years group and more than 10 years group with a significant value of 0.000 and 0.000 accordingly.

The results indicate that the pair mean comparison of the number of employees influences overall employee performance in Shandong. The mean value of the number 1-10 group is lower than 30 and lower than the 50 group, with a significant value of 0.00. The mean value of the number 11-20 group is lower than 30 and lower than the 50 groups, with a significant value ordinal. The mean value of the number 21-30 group is lower than more than 30 and lower than 50 groups with a significant value of 0.000, accordingly.

**Hypothesis 2:** Organizational culture influences employee performance of small companies in Shandong. Table 5 provides the results from using multiple linear regression to analyze data and develop the forecasting equation at the % confidence level of 95%.



**Table 5** Regression Analysis of Organizational Culture Influence on Employee Performance

Model	R	R Square	Adjusted R-Square	Std. Error of the Estimate
	0.763a	0.582	0.578	0.516

From Table 5, the analysis results show that Clan, Adhocracy, Market, and Hierarchy Culture significantly influence employee performance, with a multiple correlation coefficient (R) of 0.763. At a statistical significance level of 0.05, the predictive analysis equation's capability is 57.8%. Table 6 provides the coefficients to develop the forecasting equation. This analysis consists of 4 predictor variables, including clan culture, adhocracy culture, market culture, and hierarchy culture, which developed the

From Table 6, Regarding the Standardized Coefficients, it can be observed that Adhocracy Culture is the most crucial variable influencing employee performance, with a regression coefficient of approximately 0.313. Following closely are Market Culture, Clan Culture, and Hierarchy Culture, with coefficients of 0.247, 0.148, and 0.148, respectively

**Table 6.** The Multiple Linear Regression Coefficients for the Influence of Organizational Culture on Employee Performance

Model	Unstandardized Coefficients		Stand ardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(constant)	-0.247	0.116	-	-2.134	0.033*
Clan Culture	0.126	0.045	0.148	2.812	0.005**
Adhocracy Culture	0.270	0.050	0.313	5.406	0.000**
Market Culture	0.202	0.045	0.247	4.494	0.000**
Hierarchy Culture	0.129	0.043	0.148	3.012	0.003**
a Dependent Variable: employee performance					

## CONCLUSION

According to the research findings, it is recommended that small companies in Shandong prioritize the recruitment of employees with a bachelor's degree to ensure their skills and knowledge align with job requirements, fostering greater value creation. Emphasis should also be placed on recruiting individuals with work experience of less than 1 year, aged between 25-34 years old, who tend to exhibit better job performance. Additionally, controlling the size of the workforce is advised to maintain a more reasonable range, with teams consisting of 1-10 members being more likely to achieve superior performance outcomes. Furthermore, males have a greater advantage in performance. In terms of employee performance management, mentorship programs are suggested to support new employees' career development.

Furthermore, the monthly income of employees should be controlled below 5000. It is recommended that performance-based incentive plans that combine rewards with both individual and team achievements be introduced, as research indicates that monthly incomes below 5000 and performance-driven incentives can enhance employee performance. For employees of different age groups, flexible work arrangements, including the nature of employment and tailored training programs, are beneficial for meeting their diverse needs, fostering a more inclusive work environment that contributes to overall organizational performance.

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